

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the Patent Application of:

MARCO STURA ET AL.

Group Art Unit: 3677

Serial No.: 09/898,962

Examiner: Chuck Y. Mah

Filed: July 3, 2001

For: DEVICE FOR ELECTRICALLY
POWERING ELECTRICAL MEMBERS
POSITIONED ON A REFRIGERATOR
DOOR

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REPLY BRIEF

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Sir:

This is a Reply Brief pursuant to 37 C.F.R. §41.41 in response to the Examiner's Answer dated August 15, 2007 and in support of Applicants' appeal of the Final Rejection of the Examiner, dated January 26, 2006, of claims 14-26.

RESPONSIVE ARGUMENTS

In response to the Appellants' arguments on page 8 of the Amended Appeal Brief that Pulaski teaches away from making the combination with Phelps, the Examiner asserts that wear and deterioration of wires caused by the flexing of the wires during the repeated movement of the door is a problem for Pulaski and that "one of ordinary skill in the art would recognize the problem raised by twisting and flexing in Pulaski and the solution solving the problem by Phelps." *Examiner's Answer, page 6, ln. 17-19.* The Examiner also states that "the wires being molded in the solidified foam insulation has no effect to the twisting and flexing of the wires and therefore cannot protect the wires from flexing or twisting." *Examiner's Answer, page 6, ln. 7-9.* The Examiner is partially correct in that the foam insulation cannot protect the wires from flexing or twisting. However, the Examiner is incorrect in stating that the twisting and flexing of the wires is not effected by the foam insulation. Without the controlled twisting and flexing of the wires provided by the thimble 26, the foam insulation would solidify around the wires and would prevent movement of the wires necessary to open and close the door. The thimble covers a length of the wires at the point where the wires enter the door. The length of the thimble determines the degree of twisting and flexing of the wires and it said to be "sufficient to absorb the twisting action resulting from opening and closing the door relative to the cabinet." *Pulaski, col. 2, ln. 31-35.* Since the twisting action is absorbed, the wires will not be subject to wear, and therefore there is no motivation to seek a solution to wear of the wires, and no reason for a person of ordinary skill in the art to combine Pulaski with Phelps.

Concerning the propriety of combining Pulaski with Phelps, the Amended Appeal Brief argues that such as combination would change the operating principle of Pulaski and cites *In re Ratti*, 270 F.2d 810 (CCPA 1959) in support of this argument. The Examiner responds by arguing that Pulaski and Phelps have the same operating principle, which is as a hinge for a cabinet door to a cabinet body. Appellants submit that the Examiner is broadening the operating principle of each reference as best suits the Examiner's needs in an attempt to reach the claims without regard for the true teachings of each reference. The operating principle of Pulaski is more limited than just a hinge. The principle of Pulaski is how to pass an electrical conduit

through a standard hinge of a refrigerator to avoid the damaging flexing and twisting, not just a hinge. Not any old hinge will work on Pulaski, which is why the principle is more narrow than just a hinge.

The Examiner also argues that the instant case is not analogous to *In re Ratti* and that the Appellants argument based on *In re Ratti* is unsupported. Appellants maintain that *In re Ratti* is applicable to the instant case and that the combination “would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principles under which the [primary reference] construction was designed to operate.” *In re Ratti*, at 813. In the instant case, Pulaski (the primary reference) operates on the principle of a wired hinge having controlled twisting and flexing of the wires, wherein the principle of operation is structurally implemented by conductor wires extending though a hollow hinge pin mounted to a one-piece hinge bracket, with the hinge pin and hinge bracket forming no part of the electrical conduction path, and a thimble covering a length of the conductor wires at the point where the wires enter the door, the length of the thimble being sufficient to absorb the twisting action resulting from opening and closing the door. To combine the wired hinge of Pulaski with the wireless hinge of Phelps would require a substantial reconstruction and redesign of Pulaski, as well as a change in the basic principles under which the Pulaski construction was designed to operate. Therefore, *In re Ratti* controls, and the combination cannot be sustained.

Concerning the Appellants’ argument that the combination of Pulaski and Phelps, if proper, would not reach the claims, the Examiner does not challenge the two ways in which the Appellants contemplate combining the patents. The Examiner simply argues that Phelps teaches an element of claim 14 and offers no arguments or comments as to what a combination of Pulaski and Phelps would result in. Therefore, Appellants assert that the Examiner acquiesces with Appellants stated alternative combinations of Pulaski and Phelps.

In response to the Appellants’ arguments on page 11-12 of the Amended Appeal Brief that there is no motivation to combine Pulaski, Phelps and Mills, the Examiner asserts that Mills solves the problem of a potential short circuit and dissipation of electricity in the structure resulting from a combination of Pulaski and Phelps by providing an insulating block to insulate a

fastener from contact with its surroundings. The Examiner's current position appears to be based on a mischaracterization of Mills, because the "insulating block" of Mills that the Examiner refers to are a hinge butt (13) and a hinge leaf (14), which are analogous to hinge plates. Mills does not teach an insulating block between the hinge plate and the refrigerator. It teaches insulated hinge plates through which a conduit passes. The Examiner is well aware of this. In an Office Action dated March 10, 2006, the Examiner relied upon Mills in an anticipation rejection of claim 14. In the subsequent response, Appellants pointed out that Mills taught insulating hinge plates and not electrically conductive hinge plates, and the rejection was withdrawn by the Examiner in the next Office Action dated August 18, 2006. Therefore, the Examiner has previously acquiesced to the fact the Mills teaches insulating hinge plates, which is in direct conflict with the position the Examiner is currently taking. Appellants maintain that the Examiner's previous position was the correct one, and that Mills teaches insulating hinge plates. Therefore the addition of Mills, which teaches insulating hinge plates, to the combination of Pulaski and Phelps will not stand as the disclosure of Mills is contrary to the claimed invention, which calls for hinge plates that can conduct electricity.

In response to the Appellants' arguments on page 13 of the Amended Appeal Brief that there is no motivation to combine Pulaski, Phelps and Hoffman, the Examiner asserts that Hoffman recognizes the problem of electrolytic or galvanic corrosion and provides a solution to this problem by reinforcing the conductor terminal with a reinforcing element. However, a electrolytic corrosion is not a problem recognized by Pulaski or Phelps. Electrolytic corrosion becomes an issue when two metals having electrical potentials that differ significantly are exposed to moisture containing an electrolyte, which establishes a galvanic cell. *Hoffman, col. 1, ln. 53-56.* This situation is not described in either Pulaski or Phelps, therefore the Examiner's motivation to combine Pulaski, Phelps and Hoffman does not exist.

In response to the Appellants' arguments on page 14 of the Amended Appeal Brief that Hoffman is non-analogous art, the Examiner asserts that "conductor terminals are all within the field of the inventor's endeavor" and further states that Hoffman solves "the particular problem of corrosion." *Examiner's Answer, page 10, ln. 1-4.* The Examiner's argument is unsupportable.

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First, the field of the invention is clearly not simply "conductor terminals", but is refrigerators having arrangements for supplying power to devices in a door of the refrigerator. The scope of the claims are commensurate with the field of the invention, as they relate to a refrigerator having a compartment closed by a door in which a user device is located and an electrical connection for supplying power to the user device. Second, the Examiner appears to be attempting to broaden the problem with Hoffman addresses, which is not generally "corrosion", but specifically electrolytic corrosion. Appellants again assert that electrolytic corrosion of refrigerator hinges is not recognized by Pulaski or Phelps as being a problem in the refrigerator art.

For the above reasons, and for all the reasons set forth in the Appeal Brief, the rejections should be overruled.

CONCLUSION

In view of the foregoing, it is submitted that the continuing rejection of claims 14-26 is improper and should not be sustained. Therefore, a reversal of the rejection of claims 14-26 is respectfully requested.

Respectfully submitted,

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